

What is claimed is:

1. A method for dynamically changing an intrusion detection rule in a kernel level intrusion detection system, the method comprising the steps of:

a) generating a replica of the intrusion detection rule in a kernel area;

b) changing the replica of the intrusion detection rule according to a request of changing the intrusion detection rule from the kernel area; and

c) changing a currently applied intrusion detection rule by exchanging a value of a pointer representing the intrusion detection rule with a value of a pointer representing the changed replica of the intrusion detection rule.

2. The dynamic changing method as recited in claim 1, further comprising the step of d) changing again the replica of the intrusion detection rule identically to the currently applied intrusion detection rule.

3. The dynamic changing method as recited in claim 1, wherein in the step b) and the step c), a change state of the intrusion detection rule with a pre-assigned global variable is shown and the intrusion detection rule is changed according to the pre-assigned global variable.

4. The dynamic changing method as recited in claim 3,

wherein the kernel area transfers the request of changing the intrusion detection rule from the user area by using a system call.

5 5. The dynamic changing method as recited in claim 3, wherein the kernel area transfers the intrusion detection result to an application program of a host, in which the kernel operates, and/or an external host and/or an external network, the intrusion detection rule being applied to the
10 intrusion detection result, the intrusion detection result being transferred by setting the global variables inside the kernel and determining the transferring position inside the kernel.

15 6. A computer-readable medium storing program instruction for executing a method for dynamically changing an intrusion detection rule in a kernel level intrusion detection system, the method comprising the steps of:

20 a) generating a replica of the intrusion detection rule in a kernel area;

 b) changing the replica of the intrusion detection rule according to a request of changing the intrusion detection rule from the kernel area; and

25 c) changing a currently applied intrusion detection rule by exchanging a value of a pointer representing the intrusion detection rule with a value of a pointer representing the changed replica of the intrusion detection rule.

7. The computer-readable medium as recited in claim 6,
further comprising the step of e) changing again the replica
of the intrusion detection rule identically to the currently
5 applied intrusion detection rule.

8. The computer-readable medium as recited in claim 6
or 7, wherein in the step b) and the step c), a change state
of the intrusion detection rule with a pre-assigned global
10 variable is shown and the intrusion detection rule is changed
according to the pre-assigned global variable.

9. The computer-readable medium as recited in claim 8,
wherein the kernel area transfers the request of changing the
15 intrusion detection rule from the user area by using a system
call.

10. The computer-readable medium as recited in claim 8,
wherein the kernel area transfers the intrusion detection
20 result to an application program of a host, in which the
kernel operates, and/or an external host and/or an external
network, the intrusion detection rule being applied to the
intrusion detection result, the intrusion detection result
being transferred by setting the global variables inside the
25 kernel and determining the transferring position inside the
kernel.